

REMARKSFormal Matters:

Claims 1, 5, 7, 11, 16, and 18 have been amended to further clarify the claimed subject matter of the invention.

Claim 1 has been amended to include as dopants the "salts" of ammonia as well as "amines and their salts". Claim 11 has been amended to include the "salts" of ammonia. Antecedent basis can be found in the specification at page 3, paragraph 4.

Claim 1 has also been amended to reflect that the first material claimed is an "adsorbent" material rather than an "absorbent" material. Claim 11 has also been amended to indicate that the first material claimed is an "adsorbent" material. Antecedent basis can be found in Claim 1, as originally filed, as well as in the specification at page 3, paragraph 2.

Claims 5 and 16 have been amended to further clarify the claimed subject matter of the invention. In particular, Claims 5 and 16 have been amended to further clarify that claimed alkali and alkaline earth metal salts and their esters, ammonium salts, and amides are derivatives of the fatty acids. Antecedent basis for derivatives of the fatty acids can be found in Claims 1 and 11, respectively.

Claims 7 and 18 have been amended to correct a misspelling of "mercapto".

Claims 5, 7, 16, and 18 have been amended to clarify that mixtures of the claimed Markush groups of dopants can be used. Antecedent basis can be found in Claims 1 and 11, respectively, as well as in the specification at page 4, paragraph 4.

Claim Rejection - 35 USC 112:

Claim 17 has been rejected under 35 USC 112, 2nd paragraph, on the basis that it selects a species of Markush group (silica) that is different from the group selected in the claim upon which it depends (Claim 15).

In response, Claim 17 depends upon Claim 15, which in turn depend upon Claim 11. Claim 11 claims two separate types of materials, denoted therein as (1) materials selected from the group consisting of "silica, alumina, silicates, natural and synthetic aluminosilicates, and mixtures thereof" and (2) dopants selected from the group consisting of "fatty acids and their derivatives, amines and their salts,". Claim 15 selects silica as the first type of material. Claim 17 selects amines and their

salts as the dopant (second type of material). Applicant respectfully submits that Claim 17, in its present form, particularly and distinctly claims the subject matter of the invention.

Claim Rejection – 35 USC 102:

Claims 1, 3, 5, 7 – 11, and 15 – 22 have been rejected under 35 USC 102(e) as being anticipated by Morman (US Patent 5,914,184).

Morman does not disclose a doped odor absorbing material as claimed in the present patent application. As pointed out in the outstanding Office Action, the particles of alumina or silica in Morman are “coated” with a fatty acid (such as stearic acid) (column 8, lines 1-13). The coating covers the exterior surface, or skin, of the particle, for the purpose of facilitating free flow of the particles (prevent sticking) (column 8, lines 8 – 13).

The particles of the present invention are not “coated”, but rather are “doped” with low levels of fatty acid or other dopant material. Doping, as understood in the art, refers to the addition of very low or trace levels of impurities into a base material, which changes the characteristics or behavior of the base material. The specification discloses that dopants are used at low concentrations, as would be expected in the art, such as 1 to 1000 ppm (page 4, paragraph 3). As further disclosed in the specification, dopants can be added to the particles by, for example, adding the dopant to a solution of the adsorbent material that is then formed into dry particles by conventional techniques (e.g., filtration or centrifuge, followed by drying) (see the paragraph beginning at the bottom of page 5 – top of page 6). Doping of the particles in the present invention does not involve coating the exterior surface of particles with relatively high levels of fatty acids to form a protective skin as apparently contemplated in Morman.

Furthermore, coating the particles in Morman would not be expected to have the same effect or benefit of the doping in the present invention. The purpose of doping the particles in the present invention is to improve the adsorption capability of the particles. In contrast, coating the exterior surface of the particles for its intended purpose (free-flowing particles) would interfere with the adsorbent activity with respect to adsorbent material no longer exposed to ambient air. This would be counterproductive to the intended purpose of doping, which is to adsorb odorous gases and materials.

For the reasons set forth above, Applicant asserts that the particles disclosed in Morman are not “doped”, as required by the present claims and, therefore, Morman does not anticipate the present invention.

Conclusion:

Applicants respectfully submit that the above amendments and remarks are fully responsive to the rejections stated in the Office Action dated December 11, 2001. Reconsideration and withdrawal of the pending rejections, along with allowance of the pending claims, are requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (twice amended) An odor controlling material comprising, an adsorbentabsorbent material, said adsorbentabsorbent material being selected from the group consisting of silica, alumina, silicates, natural and synthetic aluminosilicates and mixtures thereof, said adsorbentabsorbent material being doped with one or more dopants selected from the group consisting of fatty acids and their derivatives, ammonia and salts thereof, amines and salts thereof, alcohols, aldehydes, ketones, heterocompounds containing at least one nitrogen, sulfur or oxygen atom, and mixtures thereof.

5. (twice amended) An odor controlling material according to claim 3, wherein the fatty acids and their derivatives are selected from the group consisting of straight and branched chain fatty acids containing from 1 to 12 carbon atoms, and alkali and alkaline earth metal salts and their esters, ammonium salts, and amides thereof, and mixtures thereof.

7. (twice amended) An odor controlling material according to claim 3, wherein the heterocompounds are selected from the group consisting of heterocyclic compounds containing one or two heteroatoms selected from nitrogen, sulfur, and oxygen, meeaptomercapto-compounds, thio-compounds, and other compounds containing at least one sulfur atom per molecule and having a boiling point of up to 170°C at atmospheric pressure, and mixtures thereof.

11. (twice amended) An absorbent article comprising at least one adsorbent material, said material selected from the group consisting of silica, alumina, silicates, natural and synthetic aluminosilicates and mixtures thereof, said absorbent material being doped with one or more dopants selected from the group consisting of fatty acids and their derivatives, amines and their salts, ammonia and salts thereof, alcohols, aldehydes, ketones, heterocompounds containing at least one nitrogen, sulfur or oxygen atom, and mixtures thereof.

16. (amended) An absorbent article according to claim 15, wherein the fatty acids and their derivatives are selected from straight and branched chain fatty acids containing from 1 to 12 carbonscarbon atoms, and alkali and alkaline earth metal salts and their esters, ammonium salts, and amides thereof, and mixtures thereof.

18. (amended) An absorbent article according to claim 15, wherein the heterocompounds are selected from the group consisting of heterocyclic compounds containing one or two hetero-atoms selected from nitrogen, sulfur, and oxygen, meeaptomercapto-compounds, thio-compounds, and other compounds containing at least one sulfur atom per molecule and having a boiling point of up to 170°C at atmospheric pressure, and mixtures thereof.